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(b) one or more alphavirus vectors suitable for introducing and expressing an antigen in a mammalian cell, each of said vectors comprising one or more heterologous nucleotide sequences encoding at least one of said one or more antigens.

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84. (Amended) A composition comprising infectious alphavirus particles in an immunogenically [immunogenic] effective amount, wherein said alphavirus particles comprise one or more heterologous nucleotide sequences encoding an antigen; and wherein said antigen is a native cancer cell antigen, and further wherein said alphavirus particles comprise one or more attenuating mutations.

Please add the following new claims:

85. The composition of Claim 84, wherein said alphavirus particles are alphavirus replicon particles.

86. The composition of Claim 84, wherein said alphavirus particles are Venezuelan Equine Encephalitis virus particles.

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87. The composition of Claim 86, wherein said alphavirus particles are Venezuelan Equine Encephalitis virus replicon particles.

88. The composition of Claim 86, wherein at least one of said one or more attenuating mutations is selected from the group consisting of codons at E2 amino acid position 76 which specify an attenuating amino acid, codons at E2 amino acid position 120 which specify an attenuating amino acid, codons at E2 amino acid position 209 which specify an attenuating amino acid, codons at E1 amino acid 272 which specify an attenuating mutation, codons at E1 amino acid 81 which specify an attenuating mutation, and codons at E1

amino acid 253 which specify an attenuating mutation, and the deletion of E3 amino acids 56-59.

89. The composition of Claim 84, wherein each of said one or more heterologous nucleotide sequences is operably associated with a promoter.

90. The composition of Claim 89, wherein said promoter operably associated with each of said one or more heterologous nucleotide sequences is an alphavirus 26S subgenomic promoter.

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91. The composition of Claim 84, wherein said native cancer antigen is selected from the group consisting of a helper T cell epitope, a cytotoxic T cell epitope, a T-dependent B cell epitope, and a T-independent B cell epitope.

Sub. G2

92. The composition of Claim 84, wherein said cancer antigen is a cell-surface protein or peptide.

Sub. G2

93. A pharmaceutical formulation comprising the composition of Claim 84 in a pharmaceutically acceptable carrier.

94. A composition comprising infectious alphavirus particles in an immunogenically effective amount, wherein said alphavirus particles comprise one or more heterologous nucleotide sequences encoding an antigen; and wherein at least one of said antigens is an artificial cancer antigen that is not normally expressed by a cancer cell, wherein said artificial cancer antigen is a cell-surface protein or peptide; and further wherein said alphavirus particles comprise one or more attenuating mutations.